Hispanics

Research on why Hispanics begin to smoke often is narrowly focused on subgroups, such as those from a specific city or with a particular national background. Smith and colleagues (1991), using a cross-sectional design, examined numerous potential factors affecting cigarette smoking and intentions to smoke among Puerto Rican teenagers in Boston, Massachusetts, and Hartford, Connecticut. Few statistically significant associations were found. Among Puerto Rican male adolescents, current cigarette smoking was associated with greater acculturation, more close friends who smoked, older age, and greater exposure to smoking at recreational activities. Among female Puerto Rican teenagers, the only factor associated with smoking was having close friends who smoked. In this study, the smoking status of parents had no effect on teenagers' smoking behavior.

Three studies have analyzed possible factors associated with tobacco use among Hispanic youths in the New York City area. Among Puerto Rican and Dominican seventh graders (Bettes et al. 1990), the researchers found that tobacco use was unrelated to language use (a possible proxy variable for acculturation) but was significantly associated with negative self-esteem, lower psychological well-being, higher psychological distress, and risk-taking. In a subsequent study, Dusenbury and colleagues (1992) examined possible factors associated with smoking experimentation and current cigarette use among New York City Hispanic youths aged 10–18 years. The researchers found an almost identical set of significant factors for both experimental and current use of cigarettes. These predictors included being older; having poor academic performance; having friends, parents, and siblings who smoked; believing that smoking was highly normative; and having parents with neutral or favorable attitudes toward cigarette smoking. More recently, Dusenbury and colleagues (1994) found that among Hispanic sixth- and seventh-grade students in New York City, those who smoked cigarettes tended to be older and to have a greater proportion of friends and relatives who smoked. They also found that speaking both English and Spanish at home and with friends (a behavior related to biculturalism) increased these students' probability of smoking cigarettes. Separate analyses for boys and for girls showed that boys from bilingual homes were more likely to smoke; however, this was not true among girls. Data from two Southwestern cities indicate that a low level of maternal education and low grades obtained in school were associated with cigarette smoking among Hispanic youths (Schinke et al. 1992).

Cowdery and colleagues (1997) analyzed cohort data collected in the 1989 and 1993 Teenage Attitudes and Practices Survey (TAPS) from a nationally representative sample of Hispanic adolescents aged 15–22 years in 1993. They found that among Hispanic adolescents, the most strongly associated risk factor for smoking initiation was peer smoking. Additionally, not reporting a dislike for being around smokers and believing that smoking helps people relax and reduces stress were associated with an increased risk of smoking among males and females. The belief that smoking helps keep weight down was significantly associated with smoking among females. Among males, believing that there was no harm in an occasional cigarette, that smoking reduces boredom, and that smoking helps ease nervousness at social events were all associated with an increased risk of smoking.

School participation may be an important predictor of tobacco use among Hispanics because they have the highest high school dropout rates of the major racial/ethnic groups in the United States (Kaufman and Frase 1990; Tomás Rivera Center 1993). Among white youths, dropping out of high school is a distinct correlate of cigarette use (Weng et al. 1988), but the results are not as clear for Hispanics. Chavez and colleagues (1989) studied three groups of Mexican American respondents—a group of youths who had dropped out of school, a group of youths at serious academic risk of dropping out of school, and a control group—from three Southwestern U.S. locations that varied in population size. Among Mexican American male youths, those at risk of dropping out of school and those who had dropped out of school had a higher prevalence of cigarette use but a lower prevalence of smokeless tobacco use than the control group. No significant differences in tobacco use were found among the three groups of Mexican American female youths. Watts and Wright (1990) compared Mexican American adolescents in Texas who were incarcerated with those who were attending high school and found that both minor delinquency and violent delinquency were significantly associated with tobacco use.

The results from a recent study by Felix-Ortiz and Newcomb (1992) provide additional insights into the variables related to smoking among Hispanic adolescents. The researchers assessed risk factors and protective factors as predictors of both the frequency of cigarette smoking and the quantity of cigarettes smoked. Multiple regression analyses showed that among Hispanic boys (but not among girls), risk factors such as low academic achievement, low law abidance, low religiousness, and high level of depression significantly predicted both the quantity of

cigarettes smoked and the frequency of smoking. In a more recent study, Felix-Ortiz and Newcomb (1995) found that neither familiarity with Hispanic culture nor familiarity with the larger U.S. culture was directly associated with tobacco use among boys and girls. Among Hispanic boys, cigarette use was associated with less *respeto*—a cultural value that grants prerogatives to adults and others with social power and that refers to a sense of personal self-worth. Among Hispanic girls, cigarette use was related to more involvement in Hispanic groups and political activities. A significant interaction was found between English- and Spanish-language proficiency (usually considered a proxy measure of acculturation) and frequency of cigarette smoking among both boys and girls. For example, Hispanic youths with poor English- and Spanish-language skills had the highest frequency of cigarette use, whereas those with poor English-language skills but strong Spanish-language skills reported the lowest frequency of cigarette use. Hispanic youths with strong English-language skills had moderate levels of cigarette smoking frequency, regardless of their degree of Spanish-language proficiency.

Another study of 1,411 females of Latino origin (Latinas) found differences in knowledge and perceptions about cigarette smoking between Spanish-language and English-language/bilingual young women (Campbell and Kaplan 1997). In this study, Latinas who either spoke English or were bilingual were less likely than their counterparts who spoke only Spanish to acknowledge the danger associated with smoking an occasional cigarette or to recognize the difficulty in quitting smoking, were more likely to identify beneficial aspects of smoking, and were more likely to consider smoking socially.

For many Hispanic youths, adaptation to life in the United States may produce psychological stress and anxiety. Whether these factors are directly associated with smoking among Hispanic youth is not known. In a recent study of migrant adolescents in the San Diego, California, area, Lovato and colleagues (1994) reported that respondents' level of acculturation was not related to cigarette smoking or alcohol use, even though the more acculturated adolescents were more likely to engage in binge drinking. Acculturation remains a strong theoretical consideration in smoking initiation, but current findings are limited by the methodological issues previously cited. In addition, a variety of acculturation measures have been used, and these have intrinsic limitations for assessing the cultural learning process (Marín 1992). Interpretation is particularly problematic when researchers use proxy measures such as language proficiency to measure complex psycho-

social processes like acculturation. The existence of multiple cultures within Hispanic communities adds to the complexity of this issue, as is also the case in Asian American communities.

Multiple Group Studies

Several studies have examined initiation and early use of tobacco among more than one racial/ethnic group and have compared data within and among these groups. Some of these studies have concentrated on analyzing the prevalence of perceived risk factors commonly associated with tobacco use, and other studies have addressed the question of what differentiates smokers from nonsmokers.

CDC and 13 universities conducted research in a collaborative partnership that involved a series of focus groups and in-depth interviews among African American, American Indian, Asian American and Pacific Islander, Hispanic, and white teenagers. The purpose of the research was to assess differences in the functional value of smoking, the images associated with and social norms that surround smoking, and the messages that youths report receiving about smoking. The universities used common methodologies, protocols, definitions, and coding schemes for transcripts of focus groups and interviews. Preliminary findings of this research are that (1) young smokers know about the addictive nature of nicotine; (2) smoking is viewed as "cool" and "grown up"; (3) smoking derives functional value from group belonging and stress management; (4) among girls, notions of "respect" and "reputation" are influential for nonsmoking in some groups; and (5) parental messages about smoking vary by race/ethnicity, but African American and Hispanic parents give clearer messages about not smoking than parents in other groups. Other emerging issues noted in this analysis are that (1) smoking is not seen as image enhancing among African American girls; (2) African Americans were more likely to pair cigarette smoking with marijuana to maintain a "high"; (3) parental smoking is a negative influence, particularly among American Indian families; and (4) variation exists among the racial/ethnic groups with regard to the media channels through which messages are received (Mermelstein et al. 1996).

Prevalence of Risk Factors for Cigarette Use

Several studies have analyzed how possible risk factors for tobacco use differ among youths in various racial/ethnic groups. For instance, in a study of Los Angeles County students in grades seven through

nine, Maddahian and colleagues (1986) found that African American adolescents reported having the highest number of friends who provided cigarettes, followed by white, Hispanic, and Asian American adolescents. Perceived ease in acquiring cigarettes was highest among white adolescents and lowest among Asian American adolescents; Hispanic and African American adolescents reported moderate ease in acquiring cigarettes. In assessing how earned income vs. allowance income related to cigarette use, the researchers found that Asian American and white adolescents reported having a higher earned income than adolescents in the other two racial/ethnic groups; in comparison, Hispanic and African American adoles-

cents reported receiving more allowance income than Asian American or white adolescents. Maddahian and colleagues (1988) subsequently found that African American and Hispanic youths reported greater intention to use cigarettes than white and Asian American youths. In a more recent study, involving northeastern U.S. youths in grades six through eight, Vanderschmidt and colleagues (1993) found that physical violence and sexual activity were the risk behaviors most highly associated with smoking among African American, Hispanic, and white students.

Smoking-related perceptions and risk factors also differ among older youths of different racial/ethnic backgrounds. In a study of high school seniors

Table 1. High school seniors' perceptions about the risks associated with cigarette smoking, Monitoring the Future surveys, United States, 1980–1989

Perceived risks	Gender	African Americans		American Indians	
		%	N*	%	N*
Percentage who believe that people take a great risk of harming themselves if they smoke one or more packs of cigarettes per day	Male	68.4	1,586	52.5	221
	Female	71.0	1,901	63.5	181
Percentage who believe that people disapprove or strongly disapprove of people aged 18 years and older smoking one or more packs of cigarettes per day	Male	77.6	1,717	64.1	220
	Female	80.4	2,076	63.1	210
Percentage who think their close friends disapprove or strongly disapprove of their smoking one or more packs of cigarettes per day	Male	75.4	1,193	65.2	179
	Female	80.5	1,610	69.1	155
Percentage who report that none vs. most or all of their friends smoke cigarettes					
None	Male	17.1	1,340	12.8	200
	Female	19.9	1,807	11.0	184
Most or all	Male	19.0	1,340	30.0	200
	Female	18.7	1,807	36.8	184

*The number of respondents (N) varied for each question. Each of the numbers (N) reported represents the total number of students who were asked a particular question, not the number of students who responded affirmatively.

participating in the MTF between 1980 and 1989, Wallace and Bachman (1993) found that American Indians, both males and females, were less likely than students in other racial/ethnic groups to perceive that smoking one or more packs of cigarettes per day posed a great risk to their health (Table 1). The perception that friends and people in general disapproved of smoking one or more packs of cigarettes per day was least prevalent among male and female American Indian high school seniors and most prevalent among female Asian American seniors. Finally, the percentage of students who reported that most or all of their friends smoked cigarettes was highest among American Indian seniors and lowest among Asian American seniors.

Factors Associated with Initiation of Cigarette Use

Numerous researchers have assessed patterns of cigarette use initiation among young people of various races/ethnicities. For example, Botvin and colleagues (1994) studied potential predictors of cigarette smoking onset among seventh graders in six New York schools within low-socioeconomic communities. Approximately 50 percent of the children were African American, and 36 percent were Hispanic. Statistically significant predictors for ever smoking included the absence of one or both parents, low grades in school, high prevalence of smoking among friends, and a sense of hopelessness. The data were not analyzed separately by race/ethnicity.

Asian Americans		Mexican Americans		Puerto Ricans and Latin Americans		Whites	
%	N*	%	N*	%	N*	%	N*
67.6	309	69.7	456	66.2	228	64.0	11,266
71.8	307	67.1	477	64.2	241	66.6	11,764
80.4	350	77.3	486	82.7	280	77.1	11,970
85.6	311	81.2	477	82.2	258	70.0	12,459
77.0	277	76.3	335	77.1	163	73.1	10,346
81.7	270	80.2	414	79.0	165	73.6	11,163
19.1	298	14.3	429	10.9	185	11.6	11,226
29.6	274	17.2	439	12.4	213	9.9	11,760
12.8	298	16.9	429	19.5	185	19.3	11,226
11.4	274	17.4	439	21.9	213	25.4	11,760

Source: Adapted from Wallace and Bachman 1993.

In assessing differences among racial/ethnic groups, Koepke and colleagues (1990) compared 14 potential predictors of cigarette smoking onset among seventh- through ninth-grade African Americans, Asian Americans and Pacific Islanders, Hispanics, and whites from Los Angeles and San Diego, California. The researchers found that most variables were not related to smoking onset among any of the racial/ethnic groups, and no single factor was a statistically significant predictor among all four groups. Greater anger increased the likelihood of smoking onset for African American and Hispanic youths but was unrelated to smoking onset for Asian American, Pacific Islander, and white youths. The number of close friends who had tried cigarettes was a significant predictor of smoking onset for Hispanic, Asian American, and Pacific Islander youths but not for African American or white youths. These studies underscore the variability of predictors among groups.

Peer influences also were identified in a study of sixth and seventh graders in San Diego. Elder and colleagues (1988) found that white girls, African American boys, and Asian American boys who believed that a large number of their peers smoked cigarettes were more likely to experiment with smoking. When actual continued use of cigarettes was considered, the normative belief (that a large proportion of their peers smoked) predicted cigarette smoking for Hispanic boys and for white boys and girls. These normative perceptions were most strongly associated with experimenting with chewing tobacco among white boys and girls and Asian American boys. Other studies also have found that peer smoking had a significant effect on cigarette smoking initiation. Sussman and colleagues (1987), for example, examined predictors of cigarette smoking among Southern California adolescents in Los Angeles and Orange Counties and found that peer pressure to smoke was not a predictor of smoking, although peer cigarette use was a critical predictor for Asian Americans, Hispanics, and whites (but not for African Americans). In this same study, parental pressure to smoke and knowledge of the health consequences of smoking were not associated with smoking for any group. On the other hand, three variables were statistically significant predictors for all four groups—general availability of cigarettes, difficulty in refusing offers to smoke, and intent to start smoking. The strongest predictors of cigarette smoking were different for each racial/ethnic group: for white youths, adult and peer models of smoking were the strongest predictors; for Hispanic youths, self-image as a smoker and adult or peer approval of smoking were the strongest predictors; for African

American youths, preference for risk-taking was the strongest predictor; and for Asian American youths, low self-esteem and poor achievement in school were the strongest predictors.

Castro and colleagues (1987) also found that peer smoking behaviors were significantly correlated with cigarette smoking among African American, Asian American, Pacific Islander, Hispanic, and white teenagers in Los Angeles County. Disruptive family events (e.g., number of relocations) were significantly correlated with cigarette smoking among Asian American, Pacific Islander, and white youths but not among African American and Hispanic youths. In addition, law abidance, liberalism, and religiousness were significantly associated with less frequent cigarette smoking among African American, Asian American, Pacific Islander, and white youths but were associated with more frequent cigarette smoking among Hispanics. A more recent study (Landrine et al. 1994) has found that although cigarette smoking among peers is a good predictor of cigarette smoking among white adolescents, it is a less powerful predictor of cigarette smoking among African Americans, Asian Americans, and Hispanics.

The role of personal psychological characteristics in predicting cigarette smoking has also been studied in a multiracial/multiethnic setting. Among seventh graders in New York City, Bettes and colleagues (1990) found that certain psychosocial variables—negative self-esteem, positive self-esteem, psychological distress, psychological well-being, and risk-taking—had no differential effect on tobacco use, except that psychological well-being and high risk-taking were found to be particularly protective for African American seventh graders.

Factors Associated with Initiation of Smokeless Tobacco Use

Riley and colleagues (1991) found that among African Americans, American Indians, and whites, self-reported use of smokeless tobacco was associated with the perceived consequences of use, the use of alcoholic beverages and cigarettes, peers' use of smokeless tobacco, beliefs about the health consequences of smokeless tobacco use, and level of perceived control over one's own health. The strongest predictors for all groups were previous use of alcoholic beverages and tobacco and peers' use of smokeless tobacco. Perceived negative consequences were considered most important among American Indians and whites. For African Americans and American Indians, the strongest predictor of the amount of smokeless tobacco used was previous use of alcoholic beverages and cigarettes. For

whites, the strongest predictor of the amount of smokeless tobacco used was peers' use of smokeless tobacco.

Summary, Initiation and Early Use of Tobacco

The limited number of studies renders the results fragmentary, but some general findings emerge. Certain categories of variables—sociodemographic, environmental, behavioral, personal, and psychological—may be related to tobacco use initiation and continued use among youths of various racial/ethnic minority groups. Some of these categories of variables may predict initiation of tobacco use for all people, regardless of their race/ethnicity (USDHHS 1994), but the predictive strength of these variables likely differs across racial/ethnic groups. Because of the methodological problems previously mentioned, the summarized findings are not comparable across racial/ethnic groups; these findings are meant to suggest a pattern rather than to convey a body of evidence. Future research must establish the strength of various predictors by using comparable and culturally appropriate measurements. In addition, several important predictors of tobacco use among racial/ethnic youth and the environmental factors surrounding it have not been thoroughly researched. One such example is the role of tobacco advertising, which has been shown to affect a number of risk factors related to smoking initiation, such as perceptions about the pervasiveness of cigarette smoking, its social acceptability, its danger, and its function in social situations (USDHHS 1994). Finally, the relative strength of a community's tobacco control infrastructure may influence behaviors and policies about tobacco and the tobacco industry. Robinson and colleagues (1995) suggested that this fact should be considered in assessments of initiation and early use of tobacco products.

Tobacco Use Among Adults

The factors associated with tobacco use among adult members of racial/ethnic groups have been studied even less than those among young people. Few studies have analyzed tobacco use among adult American Indians, Alaska Natives, Asian Americans, or Pacific Islanders, and only limited information is available on predictors of continued tobacco use among African Americans and Hispanics.

African Americans

Romano and colleagues (1991) examined the association between cigarette smoking, social support,

and stress in a sample of adult African Americans in the San Francisco and Oakland areas of California. African American men and women who reported high levels of stress were more likely to smoke than those reporting fewer stressful conditions. The role of stress in cigarette smoking among adult African Americans also has been supported by the findings of Feigelman and Gorman (1989) and Ahijevych and Wewers (1993). In a national sample of adults interviewed for the 1987 General Social Survey, Feigelman and Gorman (1989) found that the highest proportion of smokers were African Americans who were exposed to high levels of stress and who had a low level of occupational prestige. In comparison, whites with low stress and high occupational prestige had the lowest proportion of smokers. African American women with underdeveloped social networks were also more likely to smoke than those with strong social support. The role of social support was not statistically significant for African American men. In fact, African American men who appeared to have little emotional support from friends or family were less likely to smoke than African American men who had such support.

American Indians and Alaska Natives

Hodge and colleagues (1996) studied adult American Indian patients in Northern California. The sample included members of the Hupa, Maidu, Pit River, Pomo, and Yurok Tribes of California as well as a number of Sioux Indians. The researchers found few differences in the type and amount of social support experienced by American Indian smokers and nonsmokers. In the urban areas of San Francisco and San Jose, American Indians who reported high levels of stress were more likely to be current smokers than those who reported lower levels of stress. American Indians living in urban areas also reported being more motivated to quit than those in rural areas.

In a study of 614 American Indian women (Eastern Band Cherokee) in western North Carolina, Spangler and colleagues (1997) found several correlates with higher prevalence of current smoking, including younger age, alcohol use, no yearly physical examination, marital status of separated or divorced, lack of friends, and lack of church participation. Having a lower level of education and having consulted an Indian healer were correlated with higher smokeless tobacco use.

Asian Americans and Pacific Islanders

In a study of adult male Vietnamese refugees living in the San Francisco area, Jenkins and colleagues (1990) found that cigarette smoking was significantly related to having immigrated to the United States within the previous nine years, not knowing that smoking causes cancer, having an income below the federal poverty level, and having limited proficiency in English. No significant associations were found between men's cigarette smoking and education, alcohol use, marital or employment status, health condition, or age. In another study, conducted between 1989 and 1991 (CDC 1992), cigarette smoking among Chinese, Vietnamese, and Hispanics in California was associated with an annual income of less than $25,000, a high school education or less, recent immigration to the United States, and limited proficiency in English.

In a survey of Southeast Asian men—primarily Cambodian, Laotian, and Vietnamese—Chen and colleagues (1993) found that compared with former smokers and persons who had never smoked, smokers were more likely to have limited proficiency in English, to be more traditional (less acculturated), and to report that almost all of their five best friends were smokers. Only about one-third of the men surveyed had heard that cigarette smoking may cause heart disease. In addition, Chen and colleagues observed no statistically significant differences in the knowledge of smoking danger reported by smokers, former smokers, or persons who had never smoked.

In a survey of 832 Cambodian, Vietnamese, and Laotian men in Ohio, Moeschberger and colleagues (1997) found that the odds of never smoking and of being a former smoker were significantly higher among men who were employed than among those unemployed. In addition, current smokers were more likely than nonsmokers to be traditional or bicultural, whereas men who had assimilated into U.S. culture were four times as likely to have quit.

Hispanics

The literature on correlates of cigarette smoking among Hispanic adults is more substantive than that for the other racial/ethnic minority groups. These studies permit exploration of the interaction of cultural pride and acculturation with other correlates of cigarette smoking (Marín et al. 1989a; Castro et al. 1991) and drug use among Hispanics (see Chapter 2).

The possible relationship between symptoms of depression and cigarette smoking was investigated by Pérez-Stable and colleagues (1990), who examined the association between smoking status (i.e., current smok-

ers, former smokers, and those who had never smoked) and depressive symptoms in a random sample of 551 Hispanics in San Francisco. After controlling for gender, acculturation, age, education, and employment status, significant differences in depression (as measured by the Center for Epidemiological Studies Depression [CES-D] Scale) remained between current smokers and nonsmokers (both former smokers and lifetime abstainers). Current smokers had a 70 percent greater risk for having depressive symptoms than persons who had never smoked. A recent study that used data from the HHANES identified an association between patterns of smoking initiation and depressed mood, a history of major depression, or both (Escobedo et al. 1996). The belief that cigarette smoking reduces tension has been identified as a potent reason for smoking, according to researchers studying Hispanics from South America and the Caribbean who live in the New York City area (Larino et al. 1993), as well as Mexican Americans in San Francisco (Marín et al. 1989a).

To identify additional correlates of tobacco use among adult Hispanics, Lee and Markides (1991) compared three age groups of adults in a sample of Mexican Americans in the Southwestern United States who were interviewed between 1982 and 1984 as part of the HHANES. Among Mexican Americans aged 20–39 years, being a smoker was associated with the increased consumption of alcohol for both men and women, with poorer health for men, and with more depressive symptoms for women. Among Mexican American men aged 40–59 years, those who smoked cigarettes also consumed more alcohol than those who did not smoke. Among Mexican American women aged 40–59 years, those who smoked cigarettes also consumed more alcohol and had lower diastolic blood pressure, lower body mass, and more depressive symptoms than those who did not smoke. Among Mexican Americans aged 60–74 years, men who smoked were more likely to consume alcohol and coffee and to have lower body mass than men who did not smoke; women who smoked were also more likely to consume coffee and alcohol than those who did not smoke. A Mexican American subsample of the HHANES showed that cigarette smoking was associated with the presence of other smokers at home or at the workplace and with the respondent's level of acculturation (Coreil et al. 1991). These data also showed that cigarette smoking status was not related to educational level or to employment status but that age was positively associated with the number of cigarettes smoked per day among younger men and women aged 20–39 years. A study of Hispanic adults in New Mexico (Samet et al. 1992) found a relationship between low levels of formal education and

prevalence of cigarette smoking. Low socioeconomic status, often indicated by education, was also related to cigarette smoking in that study.

A number of studies conducted in San Francisco have compared the psychosocial characteristics of Hispanic smokers with those of white smokers. These studies provided an understanding of culture-specific differences in attitudes, norms, and expectancies of smokers and served as the basis for developing a culturally appropriate smoking cessation intervention—Programa Latino Para Dejar de Fumar (Hispanic Program to Quit Smoking) (see Chapter 5). In one such study (Marín et al. 1990a), Hispanic smokers were significantly more concerned than white smokers about harming their children's health. White smokers, on the other hand, were significantly more concerned than Hispanic smokers about burning holes in their clothes and feeling controlled by the need to smoke. White smokers were more likely than Hispanic smokers to view other smokers as friendlier and more sociable, aggressive, attractive, and feminine than nonsmokers (Marín et al. 1989b). More acculturated Hispanics provided responses that more closely resembled the responses of whites than the responses of less acculturated Hispanics (Marín et al. 1989b). Acculturation also was found to affect an individual's willingness to quit smoking on the basis of advice from his or her parents and physicians. Similarly, in a New York City area survey of 88 Hispanics who expressed interest in quitting cigarette smoking, Mahony and colleagues (1993) found that their reasons for smoking differed by their level of acculturation.

Summary, Tobacco Use Among Adults

A few variables have been associated with the continued use of cigarettes among adults from racial/ethnic groups. Cigarette smoking among members of the four racial/ethnic groups seems to be associated with depression, psychological stress, and environmental factors such as tobacco advertising and promotion and the influence of peers who smoke. The high levels of stress among members of the four racial/ethnic groups may be the product of such factors as low-prestige jobs; poverty; difficulties associated with living in a new environment or culture; limited proficiency in English; prejudice and discrimination; pressures to acculturate; limited free time; and multiple demands on time related to jobs, substandard housing, and the care of small children. Smoking cessation programs directed at members of these racial/ethnic groups should address stress reduction in the same way that tobacco prevention and control strat-

egies should consider the historical context of tobacco and the tobacco industry in the community and cultural differences among racial/ethnic minority communities.

These data also indicate that Hispanic smokers have expectations and attitudes related to cigarette smoking that differ from those of white smokers—a finding that supports the need for culturally appropriate cessation interventions. Future studies should determine if similar differences in expectancies and attitudes exist among smokers of the other three racial/ethnic groups considered in this report. The limited data available support the need for more and better designed studies of tobacco use among members of the various racial/ethnic groups.

Smoking Cessation

Little is known about the psychosocial factors that influence cigarette smoking cessation among members of racial/ethnic groups. Although people's level of addiction is an important determinant of whether they will successfully stop smoking, limited information is available on patterns of addiction among members of various racial/ethnic groups. (For more information on patterns of addiction, see Chapter 3. For details about other variables that affect smoking cessation, such as smoking patterns and access to culturally appropriate cessation services, see Chapters 2 and 5.)

African Americans

Knowledge about the damaging effects of smoking can be an important motivator of smoking cessation (Orleans et al. 1989; Jepson et al. 1991; also see Chapter 5). Studies of African Americans' knowledge about the health consequences of tobacco smoking have produced contradictory findings. Klesges and colleagues (1988), for example, interviewed African American and white adults in Fargo, North Dakota, and Memphis, Tennessee, and found that proportionately more whites than African Americans knew that cigarette smoking was related to heart attacks, emphysema, premature births, and skin wrinkles. Similarly, Vander Martin and colleagues (1990) found that African Americans from the San Francisco Bay area who smoked cigarettes were less concerned about the health effects of cigarette smoking than were whites who smoked. African Americans also were less likely to believe that cigarettes were addictive, produced harmful health effects, or caused heart attacks.

Conversely, in a 1990 study in St. Louis and Kansas City, Missouri, Brownson and colleagues (1992) found that about the same percentage of African Americans and whites believed that smoking was harmful to people's health. Although African Americans recognized the harmful effects of environmental tobacco smoke (ETS), they tended to minimize some of the health effects of smoking, particularly its link with heart disease. Similarly, an ABC News/*The Washington Post* survey conducted in February 1993 found that a large proportion of African American and white adults perceived ETS to be a health risk (Roper Center for Public Opinion Research 1993). In that poll, however, a greater proportion of African Americans than whites reported that they worried a great deal about ETS. In studies limited to African Americans, researchers have reported differences based on smoking status. Warnecke and colleagues (1978) interviewed African American women in Buffalo, New York, and found that current smokers were less likely to say they believed that cigarette smoking was related to a variety of conditions, including cancer and heart disease, than were former smokers or persons who had never smoked.

Most African American smokers want to quit, and many have tried. In a 1986 study of African American smokers who were policyholders of the North Carolina Mutual Life Insurance Company, Orleans and colleagues (1989) found that 79.3 percent of respondents had tried to quit smoking at least once in their lifetime. Hoffman and colleagues (1989) found that most of the patients in a general community hospital in Chicago who smoked reported previous attempts to quit on their own, and 65 percent wanted to stop smoking immediately. More than two-thirds of these African American smokers indicated that they would like a formal program to help them quit smoking. In a more recent survey, Ahluwalia and McNagny (1993) found that among all African American patients visiting a county-operated health facility in Atlanta, Georgia during a three-week period, 86 percent of the smokers wished to quit. Ninety-nine percent of those who wanted to quit smoking indicated they would participate in a smoking cessation program even if it involved visits to the hospital. According to data from the 1993 NHIS (CDC 1994b), 71.4 percent of African Americans aged 18 years or older who currently smoked were interested in quitting.

Royce and colleagues (1993) used a sample drawn from metropolitan communities in California, New Jersey, New York, and North Carolina as part of the Community Intervention Trial for Smoking Cessation (COMMIT) project and found that more African Americans than whites reported a strong desire to quit smoking and more attempts to quit in the past year. These researchers also observed that a larger percentage of African Americans than whites reported a need to smoke within 10 minutes of awakening (a behavioral symptom of nicotine dependence), even after the analysis controlled for age, education, and gender. In the San Francisco Bay area study by Vander Martin and colleagues (1990), African American adult smokers were more interested in quitting smoking than were white adult smokers and were also more confident that they could successfully quit.

When smoking cessation trends are compared, a different pattern emerges by gender. Hahn and colleagues (1990) found a slightly higher proportion of white women in Minneapolis and St. Paul (33 percent) than of African American women (29 percent) who reported trying cigarettes with lower levels of tar and nicotine in the previous year, and a higher proportion of white men (63 percent) than African American men (52 percent) reporting that they had tried to quit smoking.

In their study of African American women in Buffalo, New York, Warnecke and colleagues (1978) found that many women who had quit smoking attributed their quitting to the fact that cigarette smoking causes cancer (44 percent) or other diseases (45 percent); to physical side effects such as coughing or headaches (36 percent); or to negative cosmetic effects such as bad breath, stained teeth, or bad smell (34 percent). More recently, in a series of eight focus group discussions with African American women smokers residing in Chicago public housing developments, respondents said that quitting was difficult for them because they lived in a highly stressful environment that made it difficult to manage their personal lives (Lacey et al. 1993). Cigarette smoking was one of the few pleasures available to them in such an environment, and the women had few if any sources of information on how to quit smoking. In addition, these women tended to believe that cigarette smoking posed minimal health risks, that the behavior was quite common among other adults, and that all that was needed to quit was the willingness to do it. In a study of urban pregnant women, O'Campo and colleagues (1992) found that the only predictor of quitting smoking during pregnancy for African American women was intention to breast-feed, whereas among white women, the best predictors were educational level, age, and parity. About 46 percent of African American women who quit smoking during pregnancy relapsed within 6–12 weeks after delivery. Formula feeding of the infant was the best predictor of postpartum smoking relapse for both African American and white mothers.

American Indians and Alaska Natives

Few studies have focused on smoking cessation among American Indians, and no studies have addressed smoking cessation trends among Alaska Natives. In a survey of American Indians in Northern California, respondents were found to have fairly high levels of information regarding the health effects of cigarette smoking (Hodge et al. 1994). For example, a similar proportion of urban (94 percent) and rural (91 percent) American Indian smokers knew that smoking during pregnancy would harm the fetus. Although American Indian smokers were as knowledgeable as nonsmokers regarding the health effects of cigarette smoking, attitudes about smoking differed between the two groups. American Indian smokers were more likely than nonsmokers to think that it is acceptable to smoke and chew tobacco, to permit the advertising of tobacco products, to let visitors smoke in one's home, and to allow smoking in restaurants. In addition, American Indian women who smoked reported a greater number of depressive symptoms (as measured by the CES-D) than nonsmoking women. However, researchers observed no differences in the number of depressive symptoms among men who smoked compared with men who did not smoke. A fairly large number of American Indians reported that they were not interested in quitting (45 percent of residents in urban areas and 55 percent of residents in rural areas). In the 1993 NHIS, however, 65.0 percent of American Indian or Alaska Native smokers aged 18 years or over reported that they wanted to quit smoking cigarettes completely (CDC 1994b). In another study of current smokers who were patients at Indian health clinics, Lando and colleagues (1992) found that the most commonly mentioned reasons for relapse were cravings, stress, nervousness, and the pressure to smoke in social situations.

Asian Americans and Pacific Islanders

Little has been published about smoking cessation among Asian Americans and Pacific Islanders. In one study that addressed this issue, Jenkins and colleagues (1990) found that among adult Vietnamese refugees living in the San Francisco area, 82 percent of smokers wanted to quit, but 71 percent of them felt that quitting would be difficult. About 69 percent of the Vietnamese smokers had been advised by their physicians to reduce or quit smoking. Lack of information about the health consequences of cigarette smoking is a problem among some Asian American groups. In a study of Chinese Americans in Oakland,

California, Lew (1992) found that 53 percent of the respondents did not know that heart disease was associated with cigarette smoking, and 26 percent of them said they did not know that lung cancer was related to cigarette smoking. Of current Asian American or Pacific Islander smokers aged 18 years or more in the 1993 NHIS, 60.2 percent reported being interested in quitting smoking completely (CDC 1994b).

Hispanics

Several studies have examined what motivates adult Hispanic smokers to quit. Marín and colleagues (1990b) found that family-related consequences and concerns (e.g., to set a good example for one's children) contributed more to Hispanics' desire to quit smoking than to whites' desire to quit. Hispanic smokers who intended to quit believed that by doing so they would improve family relations, breathe more easily, and have a better taste in their mouths. They also believed that they would gain weight. In an earlier study, Hispanic smokers who subjectively considered themselves to be highly addicted to tobacco had the lowest levels of perceived self-efficacy to avoid cigarette smoking (Sabogal et al. 1989). The level of perceived self-efficacy to avoid smoking also declined as the reported number of cigarettes smoked per day increased. In the 1993 NHIS, 68.7 percent of Hispanic smokers aged 18 years or over said they wanted to quit smoking cigarettes entirely (CDC 1994b). Research with Hispanic adults has shown that their expectancies for quitting and for continued cigarette smoking differ in terms of their level of acculturation so that those Hispanics who have acculturated more tend to resemble whites in their expectations (Marín et al. 1989a, 1990b).

Summary, Smoking Cessation

Although the literature on predictors or correlates of smoking cessation among members of these four racial/ethnic minority groups is limited, an important theme emerges from the studies reviewed in this section. Some studies, primarily those of African Americans (see also Chapter 5), have shown that smokers tend to report having little knowledge of the health effects of smoking or techniques to quit smoking. Smokers' lack of information about cessation techniques available in the community is consistent with underdeveloped tobacco control infrastructures and the low levels of resources for research and program delivery (Robinson et al. 1995; Shelton et al. 1995). Information alone is not enough to produce a

behavior change as complex as quitting, but information on the health consequences of smoking is still perceived by some researchers as necessary to develop the motivation to quit. Information on resources and techniques for quitting may also be essential for the success of a smoking cessation program. The lack of information may appear surprising in view of the decades-long smoking education campaigns conducted by federal and state agencies and voluntary associations, but it is consistent with the thesis that resources allocated for tobacco control research and programs have been proportionately lower in racial/ethnic communities than in white communities (Robinson et al. 1995). Equally important, information may not have been presented through appropriate channels, and the motivational messages may not have been culturally appropriate (see Chapter 5).

This literature review has identified several areas for which more appropriate approaches are needed. First, the effects of stress and depression on attempts to quit smoking are particularly important among members of racial/ethnic groups. Culturally appropriate cessation interventions need to identify the sources of stress and then present stress-reduction techniques that are perceived as appropriate and effective by members of racial/ethnic groups. Second, group-specific motivations and attitudes predict a person's interest in and success at quitting smoking. Future research should focus on group-specific attitudes and expectancies as well as those that are shared by racial/ethnic groups. The effects of acculturation and group identification also need to be addressed, particularly because research involving Hispanics has shown that acculturation plays an important role in shaping the attitudes and expectancies held by Hispanic smokers (Marín et al. 1989a; 1990a,b).

In summary, the distinctive psychosocial environment of disparate racial/ethnic minority groups requires that additional tailored intervention materials be designed. Existing smoking cessation programs and strategies currently designed for the general population cannot simply be adapted or translated for use with a particular racial/ethnic group (see Chapter 5 for more discussion of cessation).

Methodological Limitations of the Literature

The content of the literature must be interpreted in light of its methodological limitations. The weaknesses of the studies demand caution, but on a more positive note, they suggest appropriate directions for future research. These limitations fall into four main categories: (1) nongeneralizability, (2) noncomparability, (3) sample size and aggregation problems, and (4) nonreporting.

Nongeneralizability. Most studies of psychosocial factors in racial/ethnic groups have been conducted in big cities such as Chicago, Los Angeles, New York, and San Francisco. Some of the findings may not apply to persons residing in smaller cities or rural areas where the psychosocial environment that influences tobacco use may differ from that in large urban areas or racial/ethnic enclaves in large cities.

Similarly, primary prevention research in this field has relied heavily on urban school populations. Most studies have excluded school dropouts; students attending alternative, parochial, or private schools; those housed in detention facilities; those living and working in rural environments; and other at-risk youths, and therefore may have limited generalizability.

Noncomparability. Many studies have used different variables to measure the same phenomenon, or they have measured the same variables differently. Differential instrumentation (Cook and Campbell 1979) is a problem because a construct may not only differ in meaning from one culture to another, but its appropriate measurement (operationalization) may also differ (Berry 1969; Triandis and Marín 1983; Marín and Marín 1991). For example, if a risk factor survey initially developed for a white population is administered unchanged to African Americans or Hispanics, it may prove to be culturally inappropriate and invalid. Instead, researchers should consider what meanings the survey terms or constructs have for the group members (Brislin et al. 1973). Few researchers have conducted the basic ethnographic and psychosocial research needed to identify these culture-specific constructs. With the exception of some investigators who have studied smoking cessation among Hispanics (discussed earlier in this chapter), most researchers have ignored a central assumption of cross-cultural research—that equivalent and culturally appropriate instrumentation must first be developed and used.

Another difficulty in analyzing and comparing studies of tobacco use among young respondents is that the studies rarely measure comparable behaviors. For example, some researchers attempt to predict the first instance when a person uses a tobacco product. Other researchers, primarily in cross-sectional studies, use their data to predict current reported tobacco use and assume that those variables may help explain initiation of tobacco use.

Aggregation problems. A common problem with some of the studies reviewed in this chapter is that racial/ethnic populations have not been assessed separately from larger populations. For example, some studies of African Americans and whites have failed to separate these groups when reporting the results. Other studies, particularly those with small sample sizes, have not separated subgroups within racial/ethnic minority groups—for example, distinguishing Chinese from Vietnamese—even when such separation is essential to properly understanding the results. Such results would be difficult to reproduce without knowledge of the population mix.

Nonreporting. The data summarized in this chapter are further limited by a bias in the reporting of results. Some researchers report only significant results and fail to indicate the equally important obser-vation that some associations are not significant. This limitation can negatively affect the design of cultur-ally appropriate prevention strategies. In addition, few of the studies reviewed in this chapter adequately de-scribe the procedures followed or the data collected. Properly understanding the meaning and measure-ment of many of the variables included in these research reports is difficult because of the paucity of detail. Finally, few of these studies have reported on issues of statistical power in their designs, which fre-quently are characterized by a small sample and a large number of variables.

Despite such limitations in the quality and com-parability of data, these studies identify the variables that should be the focus of future research and variables that need to be considered in culturally appropriate prevention programs (see Chapter 5).

Chapter Summary

Tobacco use patterns are influenced by many factors. In addition, the factors themselves and their importance in influencing tobacco use vary among ra-cial and racial/ethnic groups. Some common experi-ences and themes, however, emerge: the targeted advertising and promotions through racial/ethnic-specific media channels, the influence of peers who smoke on initiation of tobacco use, the association of depression and stress with cigarette smoking and ces-sation among adults from different racial/ethnic groups, and the influence of acculturation. Psycho-social variables help explain individual tobacco use behavior. Tobacco advertising and promotion are influential because they appear to affect the perceived sense of pervasiveness, function, and image of tobacco use, which in turn affect these psychosocial variables. Another possible influence is the historical relation-ship between racial/ethnic minority communities and the tobacco industry. Most likely, it is not any one single factor but the interplay or convergence of these factors that significantly influences both a person's de-cision to use tobacco and the resulting tobacco use pat-terns. The effects of each factor have so far eluded quantification by researchers based on available evi-dence; more research is needed to better understand the etiology, exposure, and effects of these factors.

Conclusions

1. The close association of tobacco with significant events and rituals in the history of many racial/ethnic communities and the tobacco industry's long history of providing economic support to some racial/ethnic groups—including employment opportunities and contributions to community groups and leaders—may undermine prevention and control efforts.

2. The tobacco industry's targeted advertising and promotion of tobacco products among members of these four U.S. racial/ethnic groups may undermine prevention and control efforts and thus lead to serious health consequences.

3. The high level of tobacco product advertising in racial/ethnic publications is problematic because the editors and publishers of these publications may omit stories dealing with the damaging effects of tobacco or limit the level of tobacco-use prevention and health promotion information included in their publications.

4. Although much of the original research on psychosocial factors that influence tobacco use reflects general processes that may apply to racial/ethnic populations, documenting such generalizability requires further research.

5. The initiation of tobacco use and early tobacco use among members of the various racial/ethnic minority groups seem to be related to numerous categories of variables—such as sociodemographic, environmental, historical, behavioral, personal, and psychological—although the predictive power of these categories or of specific risk factors is not known with certainty because of the paucity of research.

6. Cigarette smoking among members of the four racial/ethnic groups is associated with depression, psychological stress, and environmental factors such as advertising and promotion and peers who smoke, as is also the case in the general population. The role of these factors in tobacco use among members of these racial/ethnic groups deserves attention by researchers and persons who develop smoking prevention and cessation programs.

Appendix. A Brief History of Tobacco Advertising Targeting African Americans

A previous report of the Surgeon General (USDHHS 1994) presented a brief historical perspective of cigarette advertising in the United States focusing on advertising strategies targeting youths. Because targeted marketing to other racial/ethnic groups is a more recent phenomenon and because information about this practice with African Americans is more available, this appendix focuses on advertising to African Americans. This appendix updates the review in the 1994 Surgeon General's report, particularly as it relates to African Americans.

Early Assumptions

A significant proportion of cigarette advertising targeting African Americans was based on the belief that consumer behavior among African Americans differs from that of whites. In the 1950s, a primary belief of advertising agencies working on cigarette advertising was that status-seeking was a central motivator of African Americans. A survey of *Ebony* readers, published in *Advertising Age* (1950), showed that "prestige and quality—not cost—are the most important factors to stress when appealing to colored buyers. Because of the psychological considerations involved, Negroes are extremely desirous of being identified as customers who recognize and demand quality merchandise" (p. 17).

Another early assumption of advertising agencies targeting African Americans was that advertisements featuring African American models were more effective—or at least more appealing to African

Americans—than advertisements portraying whites. In a 1950 survey of the buying habits and motivations of African Americans, Starch and colleagues found that the majority of *Ebony* readers preferred advertisements featuring African American models, although about one-third of the African American respondents said that it did not matter whether African American models were used (*Advertising Age* 1950). In a later study of consumer reactions to the use of white or African American models, 93 white and 88 African American college freshmen in Houston were asked to react to four cigarette advertisements, indicating whether the models were ugly or beautiful, low class or high class, and friendly or unfriendly (22 bipolar scales were presented) (Barban and Cundiff 1964). In general, the cigarette advertisement with white models and the same advertisement with African American models drew similar reactions from whites and African Americans. In a more recent study, however, African Americans who strongly identified with their culture were more likely to prefer African American models (Whittler 1989). Another recent study has shown that African American college students preferred television commercials for consumer products that included African American models (Pitts et al. 1989). These findings were replicated recently among African American Chicago youths aged 12–14 years who perceived African American models in cigarette advertisements as more appealing (Huang et al. 1992).

A central belief related to targeted advertising and marketing is the assumption that members of racial/ethnic groups, particularly African Americans and Hispanics, are brand-conscious and brand-loyal consumers. This approach to purchasing is believed to motivate consumers to spend extra money to purchase a product with a recognized brand name or a product that has been used by family members and neighbors for a relatively long period of time. Large multinational brand names often are associated with quality in the immigrants' countries of origin, and purchasing of those brands in the United States may serve as an example of having "arrived" or achieved a sought-after economic status. Other researchers hypothesize that previous consumer experiences and an increase in disposable income produce brand consciousness. For example, Dallaire (1955) argued that "the Negro's desire to improve his lot, his increasing income and the fact that he's been burned so badly and so often in the past with shoddy merchandise makes him a highly brand-conscious consumer" (p. 58). Whether brand loyalty is indeed a characteristic of certain racial/ethnic minority groups continues to be debated (Deshpande et al. 1986; Donthu and Cherian 1992);

however, this assumption often has been invoked in the design of advertising directed at members of racial/ethnic groups.

Promotional campaigns directed at African Americans and members of other racial/ethnic groups also operate under the assumption that these individuals are more likely than whites to trust advertising, although most of the studies on which this perception is based have been limited by methodological flaws such as nonrandom sampling and a small sample size. In a 1961 study of 1,106 African Americans and 537 whites, about twice as many whites as African Americans had unfavorable attitudes toward all types of advertising (Bullock 1961). In a 1968 study of 1,846 persons, the 77 African Americans interviewed had the highest proportion (53 percent) of favorable responses to the open-ended question "How do you yourself feel about advertising?" compared with 1,707 whites (40 percent) (Bauer and Greyser 1968). Eleven years later, Durand and colleagues (1979) interviewed 80 persons and found that African Americans were consistently more trusting of television and newspapers than whites were, and they relied less on magazine advertisements. Soley and Reid (1983) interviewed a random sample of 185 Atlantans and found that African Americans were more satisfied with the informational value of magazine and television advertising than whites were and that high-income respondents were the least satisfied with advertising.

Early Targeted Advertising Efforts (1940s–1960s)

Turn-of-the-century advertisements for tobacco products tended to include women, to emphasize female sexuality, and to portray women as dangerous and delightful. Conversely, American Indians and African Americans often were pictured as childlike and unattractive (Mitchell 1992). Tobacco companies have depicted African Americans in their advertisements since the first Bull Durham advertisements appeared at the turn of the century, but only since the 1940s have they aggressively targeted African Americans as a distinct consumer market.

In the decades that have followed, tobacco companies have been described as "bold pioneers in both their use of new media and their targeting of other segments even when controversial" (Pollay et al. 1992, p. 49). In 1942, the advertising agency of the Lorillard Tobacco Company, J. Walter Thompson Company, began to monitor cigarette sales in African American neighborhoods as part of an Old Gold cigarette promotion (Pollay 1988). By 1948, Philip Morris was

running its "no cigaret hangover" campaign in the African American press and in daily newspapers published in languages other than English (*Tide* 1948, p. 18). By 1955, several cigarette companies, including Philip Morris, were producing advertising materials targeting African Americans and Hispanics (*Printers' Ink* 1955). Soon thereafter, Philip Morris began placing point-of-sale materials in English as well as Spanish for the newly repositioned Marlboro cigarettes (Ullman Gravure, Inc. 1957). A decade after tobacco firms first displayed an interest in African American consumers, the firms were described as "leaders among advertisers gunning for a bigger share of the Negro market" (Dallaire 1955, p. 58).

One of the earliest targeting efforts, conducted on behalf of Liggett & Myers's Chesterfield cigarettes, targeted African Americans via advertisements featuring athletes' testimonials and placed in racial/ethnic newspapers and magazines, such as *Ebony*, *Our World*, and *Tan*. The company also launched an extensive point-of-sale advertising campaign featuring African American sports figures (Dallaire 1955). The campaign included a series of six documentary films that presented African American achievements. Each film was viewed by about 3 million people in 500 primarily African American theaters. These films also were shown at more than 100 African American colleges, where free cigarette samples were distributed, reaching an estimated 900,000 additional people. The success of this effort led to the filming of 13 five-minute films featuring interviews with African American celebrities (Dallaire 1955).

The 1950s also marked the introduction of mentholated cigarettes. Although a greater proportion of African Americans now smoke mentholated cigarettes compared with members of other racial/ethnic groups (Chapter 2), no evidence exists that the menthol market was initially conceived as having any special appeal to African Americans or other racial/ethnic groups. Mentholated cigarettes are relative newcomers to the tobacco market, and they have been well received by smokers. In 1956, Brown & Williamson's mentholated and then unfiltered Kool cigarette enjoyed an increasing market share that attracted its competitors to introduce mentholated cigarettes with filters. These competitors and their entries included R.J. Reynolds's Salem, Philip Morris's Spud, Liggett & Myers's Oasis, and Lorillard's Newport cigarettes. By the end of 1957, 5 percent of all cigarettes consumed were mentholated, representing "a relatively sharp gain for a fledgling cigarette movement exploring a new taste" (Wootten 1957, p. 22).

By 1959, The American Tobacco Company, the only firm without a mentholated cigarette, was preparing to market a cigarette tentatively called Richmond. The campaign concept allegedly argued that the Richmond cigarette "gives you all of smoking's pleasure, with none of its penalties" (*Printers' Ink* 1959a, p. 12). Around the same time, Brown & Williamson was ready to test market a second menthol brand, Belair, and was introducing three other menthol brands into the market—Riviera, Spring, and Alpine (*Printers' Ink* 1959c). Tobacco companies also were beginning to use technical jargon to market their menthol products. For example, in 1959, advertising professionals described R.J. Reynolds's advertisements for Salem as "breathlessly reporting 'an amazing new development' in copy that was both opaque and studded with scientific jargon" to inform consumers about the highly porous paper that "air softens every puff. There are, obviously, just no limits to the company's tender regard for the smoker" (*Printers' Ink* 1959b, p. 8).

In a study of early cigarette advertisements targeting African Americans, investigators compared a complete set of cigarette advertisements from *Ebony* for the years 1950–1965 with a matched set of advertisements from *Life* (Pollay et al. 1992). The results, which follow, are important in promoting a better understanding of the principles followed in advertising targeted to African Americans.

By 1965, all six major U.S. cigarette firms had advertised in the pages of *Ebony* as well as *Life*. While the cigarette advertising in *Life* increased over the years, particularly between 1963 and 1965, the amount of such advertising in *Ebony* more than tripled during the same period. *Ebony* initially had fewer cigarette advertisements (16 in 1950) than *Life* (31 in 1950), but a dramatic increase in efforts targeting African Americans soon led *Ebony* to have more than twice the number of cigarette advertisements (57 in 1962) as *Life* (28 in 1962) (Pollay 1990; Pollay et al. 1992). An analysis of the page costs indicated that this pattern was not related to the relative costs of the two magazines nor was it likely related to cigarette firms' joining other firms to offer their products to African Americans through African American-owned media. Although this was a period of general growth for *Ebony*, "cigarette firms increased their spending and page acquisition even more than the average, keeping themselves out in front of the pack" and making cigarette firms the source of an estimated 6.5 percent of *Ebony*'s total advertising income in 1962 (Pollay et al. 1992, p. 54).

The investigators also found that the manifest race/ethnicity of the models portrayed in cigarette

advertisements increased between 1950 and 1965. Out of the 540 cigarette advertisements in *Ebony*, more than 84 percent featured identifiable human models, and more than 90 percent of those used African American models. In the early 1950s, the white endorsers who occasionally appeared in *Ebony* included physicians who claimed "more doctors smoke Camels" and television and movie stars (Pollay et al. 1992). Since 1958, virtually all models in *Ebony*'s cigarette advertisements have been African American. Yet none of the African American cigarette endorsers appearing in *Ebony* advertisements have appeared in *Life* advertisements, not even the widely popular sports stars and musicians.

During the early years of targeted advertising, professional athletes were most often featured in cigarette advertisements. Sports stars were used in advertisements even when the advertising copy was inconsistent with athletics. A Lucky Strike cigarette advertisement in *Ebony*, for example, referenced scientific tests in 1950 but showed a picture of an African American Olympic athlete. These advertisements sometimes differed from advertisements appearing in media targeting the general population. In 1960, Kent cigarettes illustrated its "scientist's choice" campaign in *Ebony* with another Olympic champion, not with a scientist as was done in the advertisement placed in *Life*. Although athletes also appeared in cigarette appeals to the larger public, "cigarette ads aimed at black readers of *Ebony* were significantly more likely to use athletes than those aimed at white readers of *Life*. For 1950–1965, endorsements from athletes were about five times more common in *Ebony* than in *Life*" (Pollay et al. 1992, p. 51).

Although most tobacco-producing companies were targeting the African American market through *Ebony*, these companies advertised significantly fewer cigarette brands in *Ebony* than in *Life* (Pollay et al. 1992). Advertising of new products seems to have lagged in African American publications. Whereas advertisements for filtered tobacco products first appeared in *Life* in 1953 and made up one-half of all cigarette advertising in *Life* by 1955, advertisements for filtered tobacco products did not appear in *Ebony* until 1955 and did not represent one-half of its cigarette advertising until 1958, three years later than for *Life*.

Recent Targeted Advertising Efforts (Late 1960s–1980s)

By the late 1960s, with racial/ethnic pride enhanced by the success of the civil rights movement, the nature and appeal of advertising began to change to better tailor the contents of the advertisements to targeted racial/ethnic groups. In an analysis of advertisements for all consumer products in selected issues of *Ebony* and *Life* in 1960, Berkman (1963) found that in about two-thirds of the advertisements featuring models, African American models were substituted for white models in advertisements placed in *Ebony*, although the content of the advertisements was basically identical. The African American models initially featured were predominantly light skinned, according to Berkman (1963), but subsequent studies of all *Ebony* advertisements between 1952 and 1968 showed that the use of male models with more African American features and hair texture became more common over time, whereas the advertisements continued to use female African American models with Caucasian features (Gitter et al. 1972; Weiss 1972).

Cigarette advertising has changed in similar ways. In the late 1960s, Lorillard's advertisements for Kent cigarettes featured an African American model wearing an Afro hairstyle and saying "that's where it's at" (*Advertising Age* 1968, 1969). By 1971, Liggett & Myers employed an advertising agency that specialized in targeting the African American market. The agency's campaign for L&M cigarettes featured a slogan that called the brand "super bad" (meaning excellent), and research indicated the advertisement had "great appeal among members of the black community" (*Advertising Age* 1971a, p. 20).

Not all cigarette advertisements aimed at African Americans have been successful at employing meaningful role models or at credibly using street or popular language. One African American marketing professional asserted that neither the Marlboro cowboy nor the Viceroy race car driver was meaningful to most African Americans and that Winston's use of the phrase "How good it is!" in a racial/ethnic advertisement was a "white man's cliché that retired with Jackie Gleason." In contrast, Kool's slogan, "Come all the way up to Kool, America's #1 selling menthol," was lauded for astutely positioning the leader as a sign of upward mobility (Wall 1973, p. 71).

In the 1970s, Liggett & Myers began targeting African American women with advertising for its "arty female oriented" Eve cigarettes by running advertisements with African American models in *Black America Magazine, Black Enterprise, Ebony, Essence, Jet, New Lady,* and *Tuesday Magazine* (*Advertising Age* 1971b, p. 24). The next year, Liggett & Myers began promoting L&M cigarettes to African American men and women via advertisements in African American magazines, including *Contact, National Scene,* and *Soul Illustrated*

(*Advertising Age* 1971a). In 1974, Kool cigarette advertisements in African American magazines featuring African American models used the copy "Nobody makes cool like Kool" (*Advertising Age* 1974, p. 76).

During the mid-1970s, products targeted to African Americans began to emerge. For example, R.J. Reynolds created an extra-strong menthol product, Salem Extra, which was advertised as offering "different smokes for different folks." The cigarette was market-tested in Birmingham and New Orleans through outdoor advertisements as well as newspaper and regional magazine advertisements that were supported by sampling. These efforts indicated to the advertising trade that Salem Extra should be targeted to African Americans, along with another extra-strong menthol brand, Super M, which was being tested by The American Tobacco Company in Pittsburgh (O'Connor 1974).

In the late 1970s, tobacco companies began using billboards to advertise cigarettes in racial/ethnic minority communities. Over the past two decades, billboards have appeared more frequently in commercially zoned areas and in older, poorer, and otherwise less desirable residential neighborhoods that border major highways and mass transit systems. In surveys of six cities in the late 1980s, Scenic America, a national organization opposed to billboards, found far more billboards advertising tobacco products in minority neighborhoods than in other neighborhoods

(McMahon and Taylor 1990). For example, 76.7 percent of advertising messages on billboards in one impoverished African American community in Philadelphia were for alcoholic beverages and tobacco products. In San Francisco, 62 percent of the billboards in predominantly African American neighborhoods advertised cigarettes, compared with 36 percent of all billboards citywide (McMahon and Taylor 1990). According to the Outdoor Advertising Association of America Marketing Division, tobacco companies are the leading outdoor advertisers, accounting for approximately one-third of all billboards (McMahon and Taylor 1990). Furthermore, data for 1988 show that cigarettes are the most heavily advertised product in outdoor media (CDC 1990a). A study conducted in Columbia, South Carolina, confirmed that African American communities have 2.6 times as many billboards advertising cigarettes as white communities have (Mayberry and Price 1993).

In the late 1970s, cigarette producers and their advertising agencies were becoming very aware of the significance of the African American market, as exemplified by this quotation from a well-known advertising agency: "While Blacks represent only 10.3% of the total U.S. population, they account for 18% of all smokers and 31% of all menthol smokers" (Rosser Reeves Inc. 1979, p. 12). As a result, tobacco companies have heavily advertised and promoted cigarettes to racial/ethnic minorities, particularly African Americans.

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